MODIS Science Data Support Team (SDST) Meeting Minutes 11/25/92

ATTENDEES: Lloyd Carpenter, Jy-Tai Chang, Larry Fishtahler, Al Fleig, Tom Goff, Liam Gumley, Paul Hubanks, Ed Masuoka, Jeff Olsenholler, J. J. Pan, Shahin Samadi, Greg Schmidt

NEXT MEETING: Date Time Building Room Friday, December 04 10:00 am 22 G95

## **TOPICS:**

- 1. MODIS ATMOSPHERE GROUP PRODUCTS LIST REVISION: Liam Gumley presented a list of 16 atmospheric product revisions resulting from discussions with Mike King, Yoram Kaufman, and Paul Menzel. These revisions have been incorporated into the algorithm dependency diagram by J.J. Pan.
- 2. MODIS AIRBORNE SIMULATOR (MAS): Liam Gumley reported partial success with the first version of the HDF/NETCDF interface code. It worked fine on a short test flight line, but it stopped writing data after about 1100 scan lines of a more typical flight line.

Dr Zhengming Wan at UCSB and Dr. Jim Coakley at Oregon State expressed interest in using MAS data, and they have taken steps to get started.

Keith Searight at UIUC has asked for a sample MAS data set to use in testing the Envision data visualization an manipulation system for NETCDF. Envision will run under XWindows on Unix workstations. It is due for release in January 1993.

- 3. ALGORITHM DEPENDENCY DIAGRAM AND DATA PRODUCTS LIST: J.J. Pan presented an update to the algorithm dependency diagram incorporating changes requested by the oceans and atmospheres discipline groups. The updated data products list was also included in the handout. The land discipline group's changes will be included when they are received.
- 4. C/FORTRAN INTERFACE TOOL: J.J. Pan had a brief discussion with Ted Meyer and Larry Fishtahler about the requirements for a language interface tool for interfacing C and FORTRAN software. They suggested

that this tool probably belongs to the "Science Software Development Support Tools" rather than the PGS Toolkit. The C/FORTRAN interface is an important concern in the early stages of the higher level processing shell development.

- 5. POINTING/POSITION ERROR BUDGET FOR MODIS: Paul Hubanks presented the latest information on pointing and error budgets for the EOS platform and the MODIS instrument. The effects of the errors in roll, pitch and yaw on the along-track and along-scan Earth location of pixels will be determined as a function of scan angle.
- 6. MODIS SCIENCE COMPUTING FACILITIES REQUIREMENTS: Lloyd Carpenter presented an update to the spread sheet of MODIS Level-1 data rate and volume estimates based on the latest parameter values from SBRC. The derived Level-1 rates and volumes must be based upon a data structure which includes calibration data, engineering data, ancillary data, etc. For Level-2, the first estimates must be based on reasonable assumptions about the structure for each product. Information from the team members will be used to refine the estimates.
- 7. MODIS SOFTWARE REQUIREMENTS/DESIGN REVIEWS: Tom Goff and Lloyd Carpenter presented a preliminary draft of the items to be covered in a Level-1 software review. The plan is to have a software review prior to the next science team meeting.

## **ACTION ITEMS:**

06/12/92 [Tom Goff, Carroll Hood] Develop separate detailed schedules using Microsoft Project for Level-1A and -1B software design and development. (Refine the use of Microsoft Project so that it becomes a useful tool rather than an action item.) STATUS: Open. Due Date: 07/10/92

11/06/92 [Lloyd Carpenter] Develop a plan for MODIS software requirements definition, documentation and review. (A preliminary draft was included in the 11/25/92 handout. Generate a review schedule by 12/04.) STATUS: Open. Due Date: 11/27/92

11/06/92 [Lloyd Carpenter] Develop a plan for generating updated

computer resource requirements for MODIS production processing. (A preliminary estimate for Level-1 was included in the 11/25/92 handout. A method for generating estimates for Level-2 was discussed at the meeting.) STATUS: Open. Due Date: 11/27/92